

Episode 19: AI-powered modernization: Transforming utilities for a sustainable future

0:14

Hello, my name is Maureen Mascaro, Marketing Director at Microsoft, focused on the energy customers.

0:22

Morning, Maureen.

0:23

I'm Prakash Menon from HCLTech.

0:27

I'm part of our energy and utility vertical.

0:29

I play the role of industry principal, and we have a team of domain and technology innovators helping utilities, working with the partner ecosystem to deliver solutions.

0:45

Great, Prakash, great to have you here and great to have this conversation.

0:50

The utility industry is undergoing massive transformation driven by sustainability goals, regulatory compliance, increasing demand, as well as customer expectations.

1:01

While access to affordable, stable energy is lacking in many geographies around the world, demand is surging in many others, and particularly in the realm of renewable energy sources.

1:13

Meanwhile, geopolitical, energy security and climate change dominate the headlines, with enterprises as well as individuals alike seeking action.

1:23

Through it all, a very real change is happening to the workforce, with waves of retirement hitting the industrial sector and leaving companies scrambling to attract new workers and upskill others in an attempt to fill growing skills shortages.

1:40

And underlying everything are questions around the increasing role of AI.

1:46

Privacy, security and cyber threats lead to a new sense of urgency.

1:51

Needless to say, the pace of disruption is accelerating throughout the energy industry, which means an opportunity is a thriving faster than ever.

2:02

Success of energy companies is determined by their ability to address these challenges by leveraging new technologies to remain agile as well as innovative.

2:12

So, Prakash, are your utilities companies surfacing similar concerns and prompting conversations about how to modernize thoughtfully?

2:22

Most certainly, Maureen, many of our utility customers have similar concerns or challenges and their desire to leverage technology to address them has gone exponentially high.

2:40

We are working with many of these customers where we are helping them leveraging the Microsoft AI driven solutions for utilities.

2:51

By doing that, we're able to help them optimize energy distribution, enhance renewable energy integration, bring about energy efficiencies or improving cybersecurity, reducing carbon emission.

3:09

And most importantly, and very often what we see is empowering the workers with AI tools for productivity and training, which then help our mutual customers to address the the very essence of AI and AI driven digital transformation.

3:33

Indeed, Prakash right Microsoft Works with energy customers and partners like HCLTech to help tackle challenges and accelerate the energy transition.

3:44

We are dedicated to empowering energy workforce by providing tools that enhance collaboration and communication within the organization and with external partners as well as suppliers.

3:56

Our goal is to help you thrive to in the evolving energy landscape by leveraging AI to boost productivity, ensure operational as well as supply chain resilience, and generate value to your stakeholders.

4:12

Microsoft supports energy customers in achieving their Net 0 commitments and growing sustainable businesses with cutting edge AI.

4:21

By utilizing advanced analytics and intelligent automation, we help you optimize operations, reduce emissions, and Dr.

4:30

innovation for a greener future.

4:33

However, one of the hurdles remains legacy systems.

4:38

We are hearing that utilities may still rely on decades old infrastructure and that may be inefficient as well as difficult to scale.

4:46

Legacy modernization is a huge topic in the utility industry.

4:51

Overall, businesses are struggling with the high cost, customization issues as well as integration challenges.

4:58

From Microsoft's perspective, we see companies considering moving towards loco AI driven platforms like Microsoft Dynamics 365, Power BI and Power Apps to accelerate digital transformation.

5:13

So I'm curious, how is HCLTech addressing these concerns with your customers?

5:18

Prakash, yeah, I agree totally with you that, you know, we've seen utilities and other industries looking at AI or BI or data warehouse in the past.

5:33

And it, it hasn't been given the prominence and importance as much as a large digital transformation or a ERP implementation or a customer system implementation or an OMS.

5:49

And so we have to see this as a legacy transformation to an AI driven business operating model.

5:59

And what we see is the future is all about local AI driven modernization with a focus on business utility.

6:11

We see enterprises will shift from highly customized monolithic systems to a composable scalable architecture powered by Microsoft cloud ecosystem.

6:25

And I fully agree with you that we have to have a mindset to consider all of those system that is supporting the utility operations as legacy and this has to be a new architecture and and move forward.

6:42

At the same time, HCLtech we're doubling down on expanding surround to cover the energy and utility industry's needs and it's legacy application.

6:54

I'll speak later in this session about what is this surround, Microsoft has it surrounded.

7:01

HCLTech has built the Surround HCLTech Surround around it, deepening the AI, Fabric and Copilot integration for automated code analysis, self-service automation and smart recommendations, Strengthening our partnership with Microsoft to deliver seamless modernization solutions at scale.

7:27

Wonderful.

7:28

So when enterprises hesitate to upgrade due to legacy dependencies, high customization cost, as well as business continuity risks, how does HCLTech Surround address these concerns?

7:40

Good question.

7:42

Our approach to surround focuses on three key areas.

7:47

One obviously is the surround extend and replace rather than a disruptive RIP and replay strategy.

7:56

With Surround, we layer modern Microsoft solutions around existing systems instead of completely overhauling them.

8:06

For example, instead of immediately replacing an ERP system, we extend its capability using Surround, which includes Power Apps, Power Automate and Copilot, which then introduces AI-driven process automation while maintaining the operational continuity over time.

8:29

This allows the seamless transition to fully modernize the Microsoft Dynamics 365 ecosystem with minimal disruption.

8:39

I hope that sets kind of a tone to, you know, our following discussions for you.

8:47

It does indeed.

8:48

It sounds wildly intriguing, right?

8:50

The vision may be to reduce cost, spend capital efficiency.

8:54

I heard improved reliability and the resilience and Dr.

8:57

AI and automation into all parts of the business to realize a comprehensive cloud vision with AI1 must simply start right?

9:07

And so how does HCL Tech recommend utilities take that first step for modernization?

9:13

Absolutely.

9:16

The HCL Tech surround is designed to wrap around legacy systems as I've mentioned before, rather than replacing them out correctly, so that helps them to do some early learnings, fail fast approach proof of concepts and pilots.

9:38

It seamlessly integrates with Microsoft Dynamics, Power BI, Power Apps, and Copilot.

9:44

This then minimizes customization where utilities don't have to undergo an expensive high risk system overhaul or an upgrade or a total replacement.

9:58

You can then leverage AI and automation with Microsoft Copilot.

10:04

We can enhance workforce productivity and decision making.

10:08

I'd mentioned it in in earlier discussions with you Moraine that you know, these days or in the past we used to build ABI or an AI solution for decision making at the boardroom or at the, you know, executive level.

10:25

Today copilot enables you, your Co workers, your workers in the field, your customer support employees with AI and data-driven insights that enables them to make decisions as much as how their executives take decisions.

10:41

And Power BI enables real time insights.

10:47

This then provides a 360° view of your asset or your customer and your operations, making again the same case of the worker on the field has a 360° view of his work with his back end people to support it.

11:04

Then more importantly, Power Apps accelerates digital work flows which simplifies process automation with low code and no code solution.

11:16

This holistic approach allows utilities to modernize without business disruptions.

11:24

For example, instead of custom build reports, one could use Power BI for real time analytics and dashboards.

11:33

Instead of hardcore workflows that are in your ERP or your system of records, you could use Power Automate to automate processes and thus remove the hardcore customization that is making it more expensive to manage your system.

11:52

Thus it becomes a technical debt for user specific enhancements.

11:57

We are helping customers deploy Power Apps instead of modifying your ERP code.

12:03

copilot has helped AI driven automation which reduces manual interventions and enhances decision making with predictive analytics.

12:14

All of these keeps the core system clean, upgrades friendly, and most importantly, future proves your technology investments while still delivering tailored experience.

12:30

That's a very key for the utility industry.

12:34

Marine AI can transform and extend legacy systems, unlocking new efficiencies and innovative customer experiences.

12:44

This includes AI or automated code analysis, predictive maintenance, as well as anomaly detection.

12:52

That is HCLTech help customers think about that first project and the OR the first mission to realize those benefits.

13:00

Prakash excellent question, Maureen.

13:06

The HCLRech surround AI is at the heart of it, right?

13:11

And Copilot enables some of the deployments of predictive analytics, intelligent automation, chat bot driven self-service experience.

13:22

So for a customer to deploy or to try, you have a platform that is integrated with your system of records or your ER PS and you're now able to do some proof of concepts, proof of value that brings about this fail fast approach.

13:42

Rather than doing an end to end deployment and finding out that we've not met the requirements in certain areas, the users are not happy with the overall outcome.

13:52

We use AI driven capabilities in several ways.

13:56

Let me touch upon how it helps in what we call ADAI force, which is about the technology aspects of the IT side of it.

14:05

Copilot Assist has helped many of our utility clients analyse legacy code and suggest local replacement that's becoming a code analysis and migration pool.

14:23

It has helped in automating data mapping and transformation where AI has helped in cleaning the structure and migrate data with minimal manual efforts.

14:39

Conversational UI and physician support where business users can interact with the system using natural language prompts instead of navigating through complex interfaces.

14:53

This results in a faster deployment.

14:56

And I mentioned earlier fail fast approach reduces manual work and more lower risk of failures.

15:05

And again, when you look at fail fast approach, you're, you're able to deliver high quality product that delivers results.

15:17

That's very important.

15:18

Maureen, speaking of accelerating transformation, it is a common understanding that AI is a game changer for utilities.

15:27

Microsoft Copilot combined with HCLTech surround can automate customer service interactions, work order management and predictive maintenance.

15:37

What do you see AI impacting day-to-day operations for utilities?

15:42

Well, certainly, we see AI is redefining the utilities across multiple areas.

15:50

Let me give you certain areas where we see a higher penetration, like AI models detecting equipment failures before they happen, thus producing downtime and reducing the cost of recovery of service when you have a downtime, which then addresses the predictive maintenance capabilities of the utility.

16:16

AI-powered virtual agents handle customer enquiries faster and more efficiently, improving customer satisfaction and the customer experience with the utility.

16:29

And last but not least, if you and I have discussed earlier, workforce field service optimization, AI automates work order dispatching, ensuring that resource allocation are done based on availability and the skill of the resource and improving this then improving operational efficiencies.

16:53

So with Copilot, utilities can automate routine tasks allowing employees to focus on high value initiatives like sustainability or grid modernization.

17:05

Then utilities can redirect some of these costs in addressing affordability, reliability and sustainability of the grid.

17:20

That is a powerful strategy.

17:22

Prakash, I know as a business decision maker, how I've benefited myself from the use of copilot and really just accelerating my own experiences throughout the day and ability to do things faster, smarter, sooner and really opening up my own journey to be able to do more in a given day, alternative things, high impact experiences.

17:43

And so I love that you're commenting on how you've seen this deliver for the customers that you're speaking to.

17:49

I think it sounds like a really powerful strategy.

17:52

So Prakash, have you seen successful implementations where HCLTech surround has helped modernize enterprises?

18:02

Obviously, yes, most certainly we are working with many utilities on AI and generative AI or agentic AI using Copilot and Microsoft technologies.

18:14

In many cases those deployments are very focused, use case driven and we while we see light industries in the like manufacturing have gone in the full hog, you know end to end deployment of AI and building that infrastructure, the discipline to implement AI.

18:37

We're seeing utilities embarking on to foundational activities that's related to AI, whether it's an on Prem hybrid or a cloud.

18:47

Allow me to bring a great example from one of our global manufacturing company that struggle with heavily customized on Premier P system.

18:59

Now this customer, instead of an expensive full system migration, we applied for the round to modernize their reporting with Power BI, automate their workflow with Power Automate and introduce AI-based demand forecasting using Copilot.

19:20

In just about six to seven months, they reduced operational costs to 30%, cut down reporting time from weeks to hours and now have an upgrade ready system with 0 disruption to daily operations.

19:38

That is the powerful statement and powerful solution which HCLTech can bring to this utility customers who are looking at upgrading their ERP or customer information or any other system that are critical to them, which are highly customized, complex and when they look at and cost estimates highly expensive marine indeed.

20:08

So today we've discussed the industry challenges facing most utility companies compelling a transition to cleaner energy and digital transformation.

20:18

It is a journey we see companies starting every day with the help of our expansive partner ecosystem with HCLTech to lean in Prakash.

20:27

What should our listeners do next to learn more?

20:31

Yeah, it's an important step forward on this discussion is the future is about affordability, reliability, scalability, sustainability and AI driven automation.

20:43

With that in mind, let's focus on three focus areas we're seeing and we are helping some utilities enabling to automate or optimise Power Distribution with real time AI and insights, which then delivers the smart grid or grid modernisation capability.

21:07

When we speak about sustainability and decarbonisation, we're helping utilities meet net 0 targets using AI powered analytics.

21:17

When we look at self healing network automating outage detection and the recovery from the outage using advanced predictive intelligence are some of the three key areas where we're seeing a lot of traction happening.

21:38

At the same time we as ecosystem partners, Microsoft and HCLTech continuing to collaborate, we can drive seamless risk free modernization, which will then ensure utilities to stay resilient, agile and future ready.

21:59

We like for utility companies who was struggling with outdated ERP and disconnected field service operation who are faced with the following challenges such as highly manual intervention and asset

tracking, inconsistent data across departments, limited real time visibility into customer and field operations.

22:26

Let's have a discussion about how by implementing the HCLTech Surround with Microsoft Dynamics, Power BI and Powerapps can help automate work out of management with Power Apps, provide real time asset insights using Power BI, and enhance your customer interaction using Copilot, which can then result into anywhere between 30 to 35% operational efficiency gains, faster response times and enhance grid reliability.

23:07

I'm sure these are some of the first steps that we would love for our utility customers to kind of explore worry.

23:16

I think it's fantastic, right?

23:18

Just getting started is the key point to start realizing genuine benefits.

23:23

And so Prakash, I agree this has been a wonderful discussion.

23:27

HCLTech Surround combined with Microsoft's intelligent Cloud solution is transforming the way utilities modernize without major disruption or risk.

23:40

Absolutely, Maureen.

23:43

With Microsoft Intelligent Cloud, we can minimize customization for certain, right AI driven automation and seamless integration that allows the utilities of the future through modernized systems.

24:02

HCLTech is excited for what's ahead and looking forward to engaging with you all.

24:09

Thank you.

24:11

Thank you.